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cont'd

material such as glass, having a higher permittivity than the insulator 16, is employed as the dielectric 15c. Thus, when a high frequency voltage is applied by the power supply board (not shown in Fig. 14) to the two electrode tubes 15, which are separately arranged at a specific distance from each other, a very smooth and stable discharge can be generated through the dielectric 15c. In order to prevent a discharge from other than the opposed, facing portions of the electrode tubes 15, the opposed, facing faces of the electrode tubes 15 are partially exposed, while the other portions are covered with the insulator 16. In addition, insulating joints 17 and pipes 18 are also provided for cooling the electrode tubes 15. And to cool the laser gas 10, which passes between the discharge electrodes 2, it is introduced, along a gas duct 25, to the heat exchanger 6.

Please replace the first full paragraph on page 14 with the following paragraph:

A2

A surface process is used to form the optical catalyst layer 20 on the inner faces of the box 13 and the doors 14. TiO_2 is an example for the material used for the optical catalyst layer 20. Thermal spraying is an example method that can be used when employing TiO_2 for the surface processing. According to this method, the melted powder material, after being sprayed on a material using a plasma jet device, solidifies and forms a film. Since particles of 10 to 60 μm solidify evenly, a laminated film can be deposited on the surface that effectively prevents the reflection of ultraviolet rays.

Please replace the last full paragraph on page 19 with the following paragraph:

A³
A laser oscillator according to a third embodiment of the invention will now be described while referring to Fig. 4. In Fig. 4, components denoted by reference numerals 3, 6, 10, 11, 13 to 18 and 25 are identical to or correspond to those in Fig. 1, and no further explanation for them will be given. Also, in Fig. 4, according to this embodiment, a surface processed layer 23 formed on the inner walls of a box 13 and doors 14 is a graphitized layer.

Please replace the last paragraph on page 20 (which bridges over to page 21) with the following paragraph:

A⁴
Various methods are available for use for graphitizing the surface of metal in accordance with the wavelength of the ultraviolet ray. In this embodiment, since the graphitized metal is to be employed in a special atmosphere for which a laser gas 10 is used in the box 13 of the laser oscillator 1, when graphitization is performed by applying a resin or an organic material, or by using an organic dye, the organic material will be decomposed by the ultraviolet rays, and this will accelerate the deterioration of the other parts. Therefore, a method by which an aluminum material is immersed in an acid tank to form an oxide film on its surface is employed to graphitize the metal without using an organic dye. Fig. 12 is a diagram showing the schematic processing used to form an oxide film on the surface of aluminum.

Please replace the third paragraph on page 22 with the following paragraph:

A5
Since a container is employed, before the graphitized layer 23 is formed on the inner walls of the box 13 and the doors 14, surface finishing is required so that the joined portions can be adequately sealed by packing, such as an O ring.

Please replace the first full paragraph on page 31 with the following paragraph:

A6
While chlorine can be absorbed by activated carbon, when it is used, powdered activated carbon dust composed of particles several μm in diameter are produced. When this dust attaches itself to the resonator, the optical parts may be burnt or damaged, and thus, when a process is performed, the generation of this dust must be prevented. But annealed metal can not be employed for this purpose, since at the most, the smallest opening obtainable with such a filter is $20\mu\text{m}$. Therefore, in order to permit the passage of a laser gas and to prevent the generation of the powdered activated carbon dust, a container is formed of fiber membrum or a hollow texture film made of tetrafluoro type Teflon, and the activated carbon is sealed in this container. As a result, since the powdered dust is not dispersed within the box 13 and since the laser gas can pass through the film, the chlorine that is generated can be absorbed and removed from the box 13, and the useful life of the laser oscillator can be extended.